

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C.

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)
)
Revision of the Commission's) CC Docket 94-102
Rules to Ensure Compatibility) RM-8143
with Enhanced 911 Emergency)
Calling Systems)

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PETITION FOR RECONSIDERATION AND CLARIFICATION OF THE
CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION

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SUMMARY

CTIA and its members strongly support the goal of this docket, that is the broadened availability of enhanced 911 ("E911") services to users of wireless telecommunications. However, the Commission erred in requiring CMRS providers to process 911 calls from non-subscribers. Rather than advance the purpose of rulemaking, the rule adopted in Section 20.18(b) of the Commission's Rules creates a system that: (a) denies wireless carriers and PSAPs the ability to consistently provide enhanced 911 features to wireless users; (b) guarantees there will be more fraudulent and prank calls to 911, as well as more errors and mistakes in rendering emergency services, while denying carriers the ability to limit their liability; (c) applies an incorrect analogy to a public pay telephone service while radically changing the nature of CMRS service from a licensed to an unlicensed service; and (d) establishes the potential for CMRS licensees, who are bound by Commission's Rules, to be unable to comply with these rules due to the failure of the PSAPs to agree to a single policy for processing 911 calls from non-service activated phones within a CMRS licensee's service area.

CTIA also seeks clarification and/or reconsideration of the definitions set forth in Section 20.3, 47 CFR § 20.3,

for the terms "Code Identification", "Mobile Identification Number" ("MIN"), "Automatic Number Identification" ("ANI"), and "Pseudo Automatic Number Identification" ("pseudo ANI").

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PETITION FOR RECONSIDERATION AND CLARIFICATION OF THE
CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION

Pursuant to Section 1.429 of the Commission's Rules, the Cellular Telecommunications Industry Association ("CTIA")¹ respectfully petitions for reconsideration and clarification of the Commission's Report and Order in this proceeding.²

CTIA and its members strongly support the goal of this docket, that is the broadened availability of enhanced 911 ("E911") services to users of wireless telecommunications. Unfortunately, to the extent that the Commission's Report

¹ CTIA is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the association covers all Commercial Mobile Radio Service ("CMRS") providers, including cellular, personal communications services, enhanced specialized mobile radio, and mobile satellite services.

² Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 94-102, FCC 96-264 (released July 26, 1996). On August 2, 1996, Public Notice of the Report and Order was published in Federal Register. 61 *Fed.Reg.* 40848.

and Order obligates providers of commercial mobile radio services to transmit 911 calls from non-service initialized handsets, the Commission has thwarted this goal by establishing rules that will not just frustrate, but actually will prevent wireless carriers from providing 911 enhancements to Public Safety Answering Points ("PSAPs"). CTIA therefore seeks reconsideration of Section 20.18(b), 47 CFR § 20.18(b), of the Commission's Rules which states that carriers must process all 911 calls where requested by the PSAP and all calls which transmit a Code Identification. This rule requires CMRS carriers to provide 911 service to non-subscribers and, in effect, forecloses carriers from providing the enhanced services that formed this proceeding's original predicate.

The wireless industry, working to develop standards for enhanced 911 features through the Telecommunications Industry Association's Committee TR-45.2, has identified the need to modify the definitions adopted by the Commission in this proceeding. Therefore, CTIA also seeks clarification and/or reconsideration of the definitions set forth in Section 20.3, 47 CFR § 20.3, for the terms "Code Identification", "Mobile Identification Number" ("MIN"), "Automatic Number Identification" ("ANI"), and "Pseudo Automatic Number Identification" ("pseudo ANI").

**I. Section 20.18(b) of the Rules Should be Modified
to Apply to Service-Initiated Phones**

The Commission erred in requiring CMRS providers to process 911 calls from non-subscribers. Rather than advance the purpose of rulemaking -- to make enhanced 911 services available to mobile radio callers³ -- the rule adopted in Section 20.18(b) of the Commission's Rules creates a system that: (a) denies wireless carriers and PSAPs the ability to consistently provide enhanced 911 features to wireless users; (b) guarantees there will be more fraudulent and prank calls to 911, as well as more errors and mistakes in rendering emergency services, while denying carriers the ability to limit their liability; (c) applies an incorrect analogy to a public pay telephone service while radically changing the nature of CMRS service from a licensed to an unlicensed service; and (d) establishes the potential for CMRS licensees, who are bound by Commission's Rules, to be unable to comply with these rules due to the failure of the PSAPs (whose activities fall outside of the Commission's regulatory jurisdiction) to agree to a single policy for processing 911 calls from non-service activated phones within a CMRS licensee's service area.

³ Notice of Proposed Rule Making, CC Docket No. 94-102, 9 FCC Rcd 6170, at ¶ 2.

Moreover, in contrast to the very real issues addressed above, nothing in the record in this proceeding indicates that there is an actual problem with respect to wireless carriers' provision of 911 service to their subscribers.⁴ If the Commission seeks to insure that wireless subscribers are able to obtain access to 911 service where such service is available (both in home and "roam" markets) and to avoid call processing delays (either from authentication or by requiring a credit card), the better solution is to permit CMRS carriers to validate the call where validation can be done without a call processing delay. By use of authentication, and IS-41 and similar common channel signaling systems, wireless carriers can provide both home and roaming subscribers with immediate access to not just 911 service, but to the enhanced 911 features set forth in the Report and Order's Phase I Requirements.⁵

⁴ See CTIA December 15, 1995, Comments, at 8.

⁵ If a wireless carrier is unable to provide real-time validation of a mobile station transmitting a code identification, the Commission might consider applying the Rule set forth in Section 20.18(b) to define the carrier's obligations. Under this formulation, CMRS carriers would not be obligated to provide 911 service to mobile stations that have never been activated by a carrier, or to mobile stations that the carrier has identified as being stolen, cloned, or removed from service.

**A. Rule 20.18(b) Will Thwart Wireless Carriers'
Provision of Enhanced 911 Service**

The Report and Order requires carriers to process all 911 calls, regardless of whether the mobile station has been service initialized, stolen, or cloned. In establishing this rule, the Commission has thwarted wireless carriers' ability to provide enhanced 911 service.

CTIA worked with its member carriers and their vendors in the industry standards body, TIA Committee TR-45.2, to develop the technical requirements set forth in the Consensus Agreement. These requirements were adopted by the Commission and form the basis for the Phase I and Phase II requirements. Up to the adoption of the Report and Order, the wireless industry's efforts were premised on the assumption that enhanced 911 service would be available to service-initialized mobile stations.

The wireless industry's decision to focus their efforts on providing enhanced 911 service to service-initialized mobile stations met the needs of the public safety community, as evidenced by their adoption of the Consensus Agreement. Significantly, it also removed important obstacles to CMRS carriers' ability to provide the PSAP with the ANI and call-back capabilities emergency service workers had requested. Call-back capability, however, is premised

on the requirement that each mobile station contain a unique identifier.

If the mobile station has never been service-initialized, if it has been stolen or is a clone, or if the mobile station has been retired from service after service initialization and the phone number originally associated with the unit has been assigned to a different wireless device or has been reassigned by the carrier, CMRS carriers cannot comply with the requirements of Rule 20.18(b), since they will not be able to provide a telephone number associated with the originator of the 911 call.⁶ In short, in instances where a mobile station's MIN is not unique, carriers and PSAPs cannot insure the provision of call back capability.

B. Rule 20.18(b) Will Contribute to Fraudulent and Prank 911 Calls

Fraudulent and prank calls to 911 are a significant problem for PSAPs and the public safety agencies that rely

⁶ In the case of a mobile station that has never been service initialized, no phone number will reside in the unit. If the mobile station is a clone, the ANI associated with the call will identify a subscriber, not the person who originated the call, and a call-back may be misdirected to the subscriber. What is even more likely is that the mobile station will have a MIN that is not valid because a customer has obtained a new unit (and retained the original MIN), or the customer has discontinued service. If the customer has discontinued service, the carrier may reassign the MIN to a current subscriber, or delete it from its switch. In either instance, call back to the mobile station that originated the 911 call may not be possible.

on PSAPs for emergency dispatch. In fact, the public safety agencies have assigned a high priority to their need to identify callers (through ANI) and verify the call (through call-back). As the record in this proceeding reflects, these are real world problems, not hypothetical concerns. In New Jersey, a police officer was killed in the line of duty responding to a false 911 call placed from a stolen cellular phone.⁷ Less than a year ago, in Richmond, Virginia, 911 calls placed from a cloned phone tied up emergency services for more than a week responding to false bomb threats that tied up limited 911 capacity and closed numerous businesses.⁸ The Commission's new Rule will exacerbate these problems by opening up 911 access to persons with cloned and stolen mobile stations that carriers otherwise might be able to detect, but pursuant to Rule 20.18(b) must process 911 calls.

Moreover, to the extent that a mobile station contains a MIN being used by a subscriber with a different unit (either through cloning or the customer activating a new mobile station), there is a very real likelihood that the call-back will be directed to the subscriber, who will know nothing about the 911 call, and therefore will advise the

⁷ AT&T Wireless December 15, 1995, Comments at 4 and Attachment 1.

⁸ CTIA December 15, 1995, Comments at 6-7 and Exhibit 1.

PSAP that there is no known emergency. Given the reality of wireless technology, and the number of wireless 911 calls placed to PSAPs every day, the Commission must accept as fact that actual emergencies may not be responded to, and that its Rule 20.18(b) will provide a false sense of security to callers with nonservice-initialized mobile stations.

In addition, despite carriers' and PSAPs' need to limit their liability when providing 911 services, especially given the increased likelihood (discussed above) that PSAPs may not be able to respond to 911 calls from nonservice-initialized mobile stations, the Commission has not provided carriers with any means to limit their liability. In the Report and Order, the Commission concluded that "carriers can afford themselves similar protection [to the limitation of liability local exchange carriers obtain through their tariff terms] by including similar provisions in contracts with their customers."⁹ Obviously, this is not possible under the express requirements of Rule 20.18(b) which mandate the provision of 911 service to nonsubscribers, who by definition will not have a contract with a service provider. To the extent that the Commission expects wireless carriers to look to PSAPs for indemnification when they are unable to limit their liability by way of contract,

⁹ Report and Order, at ¶ 99.

the Commission's new rules will provide PSAPs with a strong incentive to narrow rather than expand wireless access to 911 and enhanced 911 services.¹⁰

C. Rule 20.18(b) Mistakenly Confuses Equipment with Service, and Changes CMRS to an Unlicensed Service

In the Report and Order, the Commission states that it believes that "a pay telephone is the closest wireline analogy to a wireless handset, in terms of offering a capability of accessing 911 service..."¹¹ This analogy is wrong, however, because it confuses equipment -- wireless mobile stations -- with a service offering. Moreover, this false analogy risks transforming CMRS service from a licensed radio service to an unlicensed service.

Access to 911 is a service, whether the call is originated on a landline local exchange carrier's network or a CMRS licensee's wireless system. Under the Commission's rules for landline payphones, anyone can purchase a pay telephone and connect it with the public switched telephone network. However, no right to 911 access is provided individuals who simply purchase a pay telephone instrument. In other words, if a person obtains a pay telephone, but

¹⁰ Similarly, to the extent that PSAPs intend to fund the provision of enhanced 911 services from recurring monthly fees included in wireless customers' bills, the Commission has afforded nonsubscribers an opportunity to "free ride" on the 911 system, and compromised the effectiveness of a funding mechanism used or being considered by many PSAPs.

¹¹ Report and Order, at ¶ 37.

does not obtain service from a local exchange carrier, that person is not entitled to access for 911 calls.¹²

Similarly, a mobile station is a device, it is not a service.

As a licensed service, the Commission holds CMRS carriers responsible for effective operational control over all mobile stations that communicate with the licensee's base stations.¹³ Rule 20.18(b) changes this requirement by requiring CMRS licensees to provide 911 service to mobile stations that, at least in some instances, are incapable of being controlled by the licensee.¹⁴ In a fundamental manner, this changes the nature of CMRS service from a strictly licensed service, to an unlicensed service (like CB radio) where anyone with a mobile station can use a given frequency band or channel. This is an additional reason for the Commission to reconsider Rule 20.18(b).

D. CMRS Carriers' Compliance with Rule 20.18 Falls Outside the Scope of the Commission's Authority

The Commission's Report and Order permits PSAPs to elect to receive calls from nonservice-initialized mobile

¹² Localities with "warm dial tone" would be an exception. In such instances, the pay phone is no different than any other Part 68 terminal device. However, there is no "pay phone service" associated the use of the instrument to access 911.

¹³ See, 47 CFR § 22.912 (cellular).

¹⁴ CMRS carriers cannot assign new channels or power control mobile stations that it cannot address.

stations. The Commission recognizes that the nature of radio signals propagation prevents wireless services from strictly observing political boundaries, such as the streets that divide a city from a suburb, or one suburb from another. Given this intersection between the laws of physics and the reality of political boundaries, wireless carriers have never been obligated to route calls to PSAPs based on whether the mobile station has been service initialized or not. And it is not likely that carriers existing infrastructure can handle the task of stopping radio signals at these borders. Recognizing the reality of this issue, the Commission asserts that it expects the PSAPs in a given wireless service area to coordinate the decision to mandate the transmission of all wireless 911 calls, or only those associated with a code identifier.

The FCC has no jurisdiction over the decisions of individual PSAPs. Should the PSAPs in a carrier's market be unable to reach agreement on the treatment of wireless 911 calls, the CMRS provider is placed in the untenable position of not being able to comply with the express provisions of Rule 20.18(b). Therefore, the Commission should revise its Rules on reconsideration to, at a minimum, excuse CMRS carriers from their obligation to deliver calls from both mobile stations with code identifiers, and those without, if

such contradictory requests are made by PSAPs within a carrier's license area.

II. Section 20.3 of the Rules Should be Clarified or Modified to Reflect the Issues Identified by TIA

In Section 20.3 of the Rules, the Commission defines a number of terms used in the Report and Order. Through the industry standards process, TIA's Committee TR 45.2 has identified the need to amend these definitions in the following way. "Code identification" is now defined as "[a] mobile Identification Number for calls carried over the facilities of a cellular or Broadband PCS licensee, [sic] or the functional equivalent of a Mobile Identification Number in the case of calls carried over the facilities of a Specialized Mobile Radio Services."¹⁵

The definition of "code identification" should not be based on the mobile identification number ("MIN") because in certain circumstances a MIN will not serve as a unique identifier, which is required to provide some aspects of 911 service. A MIN will not be unique when a manufacturer uses a default MIN for testing purposes, when a MIN assigned to one subscriber is assigned to another, when a subscription lapses, when a carrier assigns a MIN that is duplicated by carriers in Mexico and other locations outside of World Zone One, when illegal clones intentionally duplicate a MIN, or when a carrier assigns the same MIN to more than one phone

¹⁵ Report and Order at Appendix C, p. 1, § 20.3.

as part of a specialized service offering. Many of the duplicate assignment problems of the MIN are being addressed in newer technologies by using International Mobile Station Identifiers ("IMSI"), International Mobile Equipment Identities ("IMEI"), or Temporary Mobile Station Identities ("TMSI"). Given these developments, the definition of "code identification" should be expanded to include any number used by a mobile station to identify itself to a network.

Similarly, the definition of a "MIN" should be revised to be defined as "a number that identifies the mobile station."¹⁶ Although the MIN originally coincided with a telephone directory number associated with the mobile unit, in the past several years the MIN has become a true mobile identifier and, increasingly, may not be associated with a telephone directory number. Thus, reference to the directory telephone number should be deleted.

During Phase I of deployment, CMRS carriers must relay the caller's telephone number and the location of the base station or cell site receiving a 911 call to the PSAP through the use of Automatic Number Identification ("ANI") or pseudo-ANI.¹⁷ ANI is defined as "[a] system which permits the identification of the caller's telephone

¹⁶ Section 20.3 defines MIN as a "34-bit number that is a digital representation of the 10-digit directory telephone number assigned to a mobile station."

¹⁷ Report and Order at ¶ 63.

number," and pseudo-ANI is defined as "[a] system which identifies the location of the base station or cell site through which a mobile call originates."

The definition of ANI should be revised to reflect the fact that ANI is a system for billing calls that indicates the party responsible for paying for the call. Most of the time, the ANI is the directory number of the calling party, but this is not always the case. In emergency service applications, however, the ANI is modified to identify the calling party so it may be used as a call-back number. ANI, then, should be defined as "a system that identifies the billing account for a call. For 9-1-1 systems, the ANI identifies the calling party and may be used as a call-back number."

The definition of pseudo-ANI should be revised so that it does not imply any particular method of implementation. The current definition requires a pseudo-ANI system to identify the location of the base station or cell site through which a mobile call originates. In order to handle interLATA calls, calls involving access tandems, calls involving interexchange carriers, or calls that must be interworked between MF and ISUP signaling, ANI must be used to identify the calling party. The called number, then, must be used to carry the base station or cell site identification information in the form of a directory number

because many LEC switches do not have the capability to convey both the ANI and location information to the intermediate system or destination system. In order to retain the flexibility required under these circumstances, Pseudo-ANI should be defined more broadly as follows:

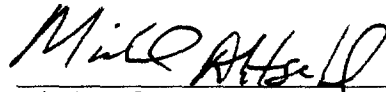
A number consisting of the same number of digits as Automatic Number Identification (ANI), is not a North American Numbering Plan telephone directory number and is used in place of an ANI to convey special meaning. This meaning is determined by agreements as necessary between the system originating the call, intermediate systems handling and routing the call, and destination systems.

For the reasons set forth above, the definitions of "code identification", "mobile identification number ("MIN")", "automatic number identification" ("ANI"), and "pseudo ANI" used to define carriers' Phase I obligations should be revised.

CONCLUSION

For the foregoing reasons, CTIA urges the Commission to modify Section 20.15(b) of its Rules to require CMRS providers to transmit 911 calls only from service-initialized handsets, and to clarify or modify the definitions set forth in Section 20.3 of its Rules.

Respectfully submitted,



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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing "Comments of the Cellular Telecommunications Industry Association" were served this 3rd day of September, 1996 by first class mail, postage prepaid, on the parties on the attached list.


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